REMARKS:

Applicants express gratitude to the Examiner for the granting of a telephone interview after Final. Reconsideration and allowance in view of the foregoing amendments and the following remarks are requested. By this amendment, Applicants have amended claims 1, 2, 9, and 10. No new matter is added.

Interview Summary

During a telephonic interview held on July 28, 2009, Applicants' representative proposed the above amendment to claim 1. The claims were reviewed and the cited reference, Chetverin et al. (U.S. 6,322,971), was discussed. Agreement was not reached and the Examiner stated that further search was necessary.

Response to Rejections under 35 U.S.C. §102

Claims 1-33 were rejected under 35 U.S.C. §102(b) as being anticipated by Chetverin et al. (U.S. 6,322,971). The Examiner asserts that there is no requirement in claim 1 that the sequences be known or for the synthesis to occur in a de novo fashion.

Applicants submit that, as amended, independent claims 1 and 2 are distinguished from the method disclosed in Chetverin. The fundamental difference between the presently claimed method and the method of Chetverin is that Chetverin relates to making complementary copies of oligonucleotides found in a sample by extending a support-bound primer that hybridizes thereto. Thus, the sequence that is bound to the support in Chetverin is actually part of the sequence that will be prepared.

Conversely, the presently claimed method relates to making a complementary copy of the support-bound template sequence by adding an enzyme and nucleotide building blocks to form a single-stranded complementary copy of the template. The present claim amendments clarify these distinctions and are supported by the specification as a whole.

Applicants submit that Chetverin discloses that the primer sequences on the support allow hybridization with a target sequence, i.e. a template. There is no disclosure in Chetverin that the nucleic acid fragments bound to the support comprise base sequences which are chosen to be complementary to the nucleic acids to be prepared. Thus, step (a) is clearly not anticipated by Chetverin because Chetverin does not relate to making a complementary copy of the template that is bound to the support and the sequence of the support bound nucleic acid is not chosen to be complementary to the sequence to be prepared.

With regard to steps (b) and (c), Chetverin only discloses adding nucleotide building blocks and an enzyme to extend the primer sequence which is bound to the support to make a complementary copy of the hybridized target oligonucleotide, whereas the present claims recite that the addition of nucleotide building blocks and an enzyme brings about generation of complementary copies of the base sequences from step (a). Thus, Chetverin does not disclose generating at least one single-stranded complementary copy of the base sequences which are chosen to be complementary to the nucleic acids to be prepared.

With regard to claim 2, the Examiner asserts that Chetverin discloses a support containing an array of different nucleic acid fragments (Figure 5A) that are

complementary to regions of a target nucleic acid to be prepared and serve as primers (Figure 5B, first step), extension of the primers to form partial sequences (Figure 5B, second step) and assembling of the partial sequences to form double-stranded products by various methods, including assembly by overlapping of partial sequences (col. 6, lines 9-29, col. 36, line 34 to col. 37, line 44 and Figures 9A and 10A-C), and covalent assembly of partial sequences by ligation using splint oligonucleotides (col. 79, lines 54-60), the product of which can then be converted to double-stranded products by PCR amplification (col. 80, lines 7-9). Thus, the Examiner asserts that the partial sequences prepared are "predetermined" because they are recognized by primers bound to the support and produce a series of partial products that can be arranged into a full-length product.

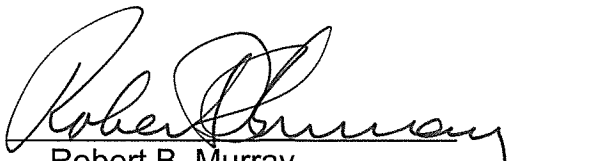
Applicants submit that Chetverin does not disclose making a complementary copy of the nucleic acids that are on the support which are chosen to be complementary to the nucleic acids to be prepared. Conversely, Chetverin discloses making a complementary copy of the target oligonucleotide from a sample solution by extending a support-bound primer that hybridizes to a region within the target. Thus, the sequence of oligonucleotides that is bound to the support is actually part of the sequence that will be prepared by the method of Chetverin, rather than complementary to the sequence to be prepared. Further, Chetverin does not disclose generating complementary copies of the nucleic acids which are bound to the support in step (a), but instead discloses making a complimentary copy of a sample oligonucleotide by extending a hybridization primer.

Conclusions

In view of the above remarks, Applicants believe that all of the Examiner's rejections set forth in the April 28, 2009 Office Action have been fully overcome and that the present claims fully satisfy the patent statutes. Applicants, therefore, believe that the application is in condition for allowance. The Director is authorized to charge any fees or overpayment to Deposit Account No. 02-2135.

The Examiner is invited to telephone the undersigned if it is deemed to expedite allowance of the application.

Respectfully submitted,

By 

Robert B. Murray
Attorney for Applicant
Registration No. 22,980
ROTHWELL, FIGG, ERNST & MANBECK
1425 K. Street, Suite 800
Washington, D.C. 20005
Telephone: (202) 783-6040

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